

AL POLLUTION PREVENTION QUARTERLY REPORT

The purpose of this report is to track and acknowledge the DOE Albuquerque Operations Office (AL) sites' considerable efforts to be conscientious environmental and fiscal stewards through their Pollution Prevention (P2) Program activities. It is intended to encourage sites to share information on successful P2 activities, to ensure integrated and cost effective AL P2 efforts, and to inform management of AL P2 activities and progress.

This is the third edition of the *AL Pollution Prevention (P2) Quarterly Report*. It includes AL P2 activities and accomplishments submitted to the DOE Headquarters (HQ) Pollution Prevention Team (EM-22) P2 database for the first quarter FY00. This report now reflects fiscal year reporting, which is a change from prior calendar year reporting.

Program Summary

- AL sites reported a total of 13 new and 49 ongoing P2 projects in the first quarter. Waste reduction totaled 5,934 cubic meters (M³) for new projects and 12,132 M³ for ongoing projects. Sanitary waste reduction accounted for 17,753 M³ of the 18,066 M³ reported reduction.
- Reported cleanup/stabilization waste reduction was 239 M³ in the first quarter. The DOE Office of Environmental Management (EM) FY00 commitment is 1731 M³, based on the Secretarial goal to reduce cleanup/stabilization waste by 10 percent.

Program Issues and Upcoming Events

- HQ decided that the Triennial P2 Program Plan update scheduled for FY00 will be delayed until FY01. In its place we are awaiting guidance from HQ on the development of site plans to address how sites will meet the new Pollution Prevention/Energy Efficiency goals issued by Secretary Richardson on November 12, 1999. We anticipate this guidance will be issued in March 2000, with site plans due June 30, 2000.
- Defense Program (DP) funded FY00 P2 AL site budgets declined from FY99 levels at the four major AL sites (Los Alamos National Laboratory [LANL], Sandia National Laboratories [SNL], Pantex Plant [PX] and Kansas City Plant [KCP]). Actual FY99 costs and projected FY00 costs provided by the sites in response to a January 5, 2000 memorandum, "Waste Minimization Costs," are as follows:

	<u>FY 99</u>	<u>FY 00</u>
LANL	\$1,123K	\$900K*
SNL	\$904K	\$847K
PX	\$222K	\$200K
KCP	\$383K	\$310K

* Verbal information has been received that this number has been reduced to \$700K.

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- The AL P2 Program is developing a database of unfunded AL site P2 projects. This information is being gathered to allow us to respond to HQ inquiries on short notice and to assist sites in obtaining project funding.
- Earth Day will be celebrated nationwide on April 22, 2000. LANL will be holding their Earth Day celebration on April 27. Site P2 awards will be distributed to LANL employees and New Mexico Environment Department Secretary Pete Maggiore will be the keynote speaker for the event. The AL P2 Program will participate in the LANL event. SNL/California and Waste Isolation Pilot Plant are planning events, but have no specific details at this time. No Earth Day events are presently planned at SNL/New Mexico, PX, Grand Junction Office, or KCP.
- AL sites won two of the 13 DOE P2 awards. Congratulations to PX and LANL. Pantex won for their *Composting of High-Explosive Contaminated Soil* submission and LANL won for their *Electrolytic Decontamination of Gloveboxes* submission. It has not yet been decided when these awards will be presented.
- The AL site P2 Program round robin is being planned for late April. HQ DP-45 and EM-22 will participate in the review.

FY00 First Quarter AL P2 Performance

Ongoing or significant P2 accomplishments from prior quarters are not generally reported a second time, unless exceptional progress has been made during the current reporting period. Significant first quarter FY00 accomplishments include:

- Pantex recycled approximately 9.74 M³ of Class 1 solvents from their high explosive dissolution process, resulting in a savings of \$31,587. For purposes of this report, the waste is categorized as hazardous; however, it is actually classified as nonhazardous state-regulated Class 1 industrial solid waste.
- SNL/NM crushed 6,500 tons of existing concrete and asphalt material to required specifications for upcoming SNL/NM projects. The recycling and reuse of this material resulted in \$75,000 of new material cost avoidance.
- LANL sorted and segregated and recycled or reused 4.60 M³ of contaminated electronic equipment mixed low-level waste. This new recycle/reuse program resulted in savings of \$345,000.

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New and ongoing AL P2 projects and associated waste reduction and cost savings for first quarter FY00 are shown in the table below.

First Quarter FY00 AL Pollution Prevention Project Summary							
P2 Activity Type	Waste Type	Total Projects				Waste Reduction for Quarter (M3) ^[1]	Savings for Quarter (\$)
		New Projects	Ongoing Projects	Cleanup/ Stabilization	Routine Ops		
Programmatic	Other	1	6	0	7	0.00	\$45,458
Total		1	6	0	7	0.00	\$45,458
Recycle/Reuse	HAZ	4	11	2	13	100.57	\$758,597
	LLW	2	1	1	2	96.71	\$153,769
	MLLW	1	0	0	1	4.60	\$345,000
	SAN ^[2]	5	19	2	22	6,552.52	\$155,648
Total		12	31	5	38	6,754.40	\$1,413,014
Segregation	LLW	0	1	0	1	99.20	\$157,728
	MLLW	0	1	1	0	1.74	\$130,500
Total		0	2	1	1	100.94	\$288,228
Source Reduction	HAZ	0	5	0	5	2.42	\$12,922
	LLW	0	1	0	1	7.95	\$8,000
	SAN ^[2]	0	1	0	1	12.56	\$1,690
	WW-SAN	0	3	1	2	11,187.80	\$23,790
Total		0	10	1	9	11,210.73	\$46,402
AL COMPLEX TOTAL		13	49	7	55	18,066.07	\$1,793,102

^[1] Hazardous wastes and sanitary waste are measured in metric tons; all other waste types are measured in cubic meters. Quantities indicated in this table assume that one metric ton is equivalent to one cubic meter.

^[2] Includes sanitary wastewater

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Individual Site Accomplishments

The table below represents a roll-up summary of AL P2 accomplishments reported for first quarter FY00. Subsequent tables indicate first quarter FY00 accomplishments for the individual AL sites. Additional accomplishment information is available at the EM web site, at <http://twilight.saic.com/WasteMin/MainReports.htm>.

AL Site P2 Reported Performance - FY00			
Site	# of Reported Accomplishments	YTD Reductions ^[1]	YTD Savings (\$)
Grand Junction Office	1	12.68	\$0
Kansas City Plant	1	3.10	\$4,225
Los Alamos National Laboratory	21	785.62	\$1,342,893
Pantex Plant	16	11,291.98	\$321,794
Sandia National Laboratories-CA	0	0.00	\$0
Sandia National Laboratories-NM	9	5,912.07	\$123,344
Waste Isolation Pilot Plant	14	60.62	\$846
Total	62	18,066.07	\$1,793,102

^[1] Hazardous wastes and sanitary waste are measured in metric tons; other waste types are measured in cubic meters. Quantities indicated in this table assume that one metric ton is equivalent to one cubic meter.

Grand Junction Office First Quarter FY00 Accomplishments						
Accomplishment	P2 Activity Type	Waste Type	Routine or Cleanup Work	New or Ongoing Project	Waste Reduction for Quarter (M ³) ^[1]	Savings for Quarter (\$)
Miscellaneous recycling	Recycle/reuse	SAN	Routine	Ongoing	12.68	\$0
Activity Totals	1				12.68	\$0
YTD P2 Savings/Avoidances	1				12.68	\$0

^[1] Hazardous wastes and sanitary waste are measured in metric tons; other waste types are measured in cubic meters. Quantities indicated in this table assume that one metric ton is equivalent to one cubic meter.

Kansas City Plant First Quarter FY00 Accomplishments						
Accomplishment	P2 Activity Type	Waste Type	Routine or Cleanup Work	New or Ongoing Project	Waste Reduction for Quarter (M ³) ^[1]	Savings for Quarter (\$)
Reuse within facility of clean, used hydraulic fluid	Recycle/reuse	SAN	Routine	New	3.10	\$4,225
Activity Totals	1				3.10	\$4,225
YTD P2 Savings/Avoidances	1				3.10	\$4,225

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Los Alamos National Laboratory First Quarter FY00 Accomplishments						
Accomplishment	P2 Activity Type	Waste Type	Routine or Cleanup Work	New or Ongoing Project	Waste Reduction for Quarter (M ³) ^[1]	Savings for Quarter (\$)
Maintain coolant peak performance indefinitely without the use of biocides using a combination of oil skimming, filtration, testing, and treatment	Recycle/reuse	HAZ	Routine	New	2.5	\$18,250
Paint waste avoidance from MST-6 Cyclone Project	Recycle/reuse	HAZ	Routine	New	3.6	\$26,280
Site-wide oil recycling	Recycle/reuse	reuse	Routine	New	5.72	\$41,756
Paint thinner recycling	Recycle/reuse	HAZ	Routine	Ongoing	0.3	\$2,190
Site-wide lead/steel recycling	Recycle/reuse	HAZ	Cleanup	Ongoing	41.16	\$300,450
Site-wide offsite recycle of hazardous materials	Recycle/reuse	HAZ	Cleanup	Ongoing	12.5	\$91,250
Cardboard recycle, LLW avoidance	Recycle/reuse	LLW	Routine	Ongoing	91.31	\$145,183
Reuse of LLW equipment from RCAs	Recycle/reuse	LLW	Cleanup	New	1.8	\$2,862
Sorting, segregation, recycle, and reuse of LLW electronic equipment	Recycle/reuse	LLW	Routine	New	3.6	\$5,724
Sorting, segregation, recycle, and reuse of MLLW electronic equipment	Recycle/reuse	MLLW	Routine	New	4.6	\$345,000
Cardboard recycle sanitary avoidance	Recycle/reuse	SAN	Routine	Ongoing	36.05	\$4,850
MS A1000- junk mail recycling	Recycle/reuse	SAN	Routine	Ongoing	186.34	\$25,069
Office paper recycling	Recycle/reuse	SAN	Routine	Ongoing	24.24	\$3,261
Site-wide brush reuse at landfill	Recycle/reuse	SAN	Cleanup	Ongoing	42.37	\$5,700
Site-wide construction/demo waste reuse at landfill	Recycle/reuse	SAN	Routine	Ongoing	89.42	\$12,031
Site-wide metal recycling	Recycle/reuse	SAN	Cleanup	Ongoing	125.76	\$16,914
Activity Totals	16				671.27	\$1,046,770
Green is clean	Segregation	LLW	Routine	Ongoing	99.2	\$157,728
Various projects to decontaminate MLLW metal	Segregation	MLLW	Cleanup	Ongoing	1.74	\$130,500
Activity Totals	2				100.94	\$288,228
GSAF 99 nitric acid recovery with MST-7	Source Reduction	HAZ	Routine	Ongoing	0.1	\$730
Photochemical waste reduction	Source Reduction	HAZ	Routine	Ongoing	0.75	\$5,475
Phone books on the web	Source Reduction	SAN	Routine	Ongoing	12.56	\$1,690
Activity Totals	3				13.41	\$7,895
YTD P2 Savings/Avoidances	21				785.62	\$1,342,893

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Pantex Plant First Quarter FY00 Accomplishments						
Accomplishment	P2 Activity Type	Waste Type	Routine or Cleanup Work	New or Ongoing Project	Waste Reduction for Quarter (M ³) ^[1]	Savings for Quarter (\$)
Lower electricity usage due to installation of new air dryers	Programmatic	Other	Routine	Ongoing	0.00	\$7,500
Lower natural gas usage due to blockage of Main Steam Distribution System	Programmatic	Other	Routine	Ongoing	0.00	\$36,708
Toxic release inventory (TRI) reporting not required	Programmatic	Other	Routine	Ongoing	0.00	\$1,250
Lower ODS due to replacement of older chillers	Programmatic	Other	Routine	Ongoing	0.00	\$0
Activity Totals	4				0.00	\$45,458
Class I solvent recycling from the high explosive dissolution process	Recycle/reuse	HAZ	Routine	New	9.74	\$31,587
Class I solvent recycling	Recycle/reuse	HAZ	Routine	Ongoing	0.13	\$385
Fluorescent light recycling	Recycle/reuse	HAZ	Routine	Ongoing	2.50	\$0
Hazardous battery recycling	Recycle/reuse	HAZ	Routine	Ongoing	10.56	\$96,903
Hazardous scrap metal recycling	Recycle/reuse	HAZ	Routine	Ongoing	8.56	\$116,514
Routine hazardous solvents recycling	Recycle/reuse	HAZ	Routine	Ongoing	0.87	\$9,806
Oil filter recycling	Recycle/reuse	HAZ	Routine	Ongoing	0.74	\$1,621
Precious metals recycling	Recycle/reuse	HAZ	Routine	Ongoing	0.26	\$1,730
Nonhazardous scrap metal recycling	Recycle/reuse	SAN	Routine	Ongoing	76.76	\$1,608
Activity Totals	9				110.12	\$260,154
Reducing oil changes by analyzing oil	Source Reduction	HAZ	Routine	Ongoing	0.86	\$2,092
ER low-flow sampling	Source Reduction	WW-SAN	Cleanup	Ongoing	14.04	\$11,140
Modifications of chlorine injection at the sewage treatment facility	Source Reduction	WW-SAN	Routine	Ongoing	11,166.96	\$2,950
Activity Totals	3				11,181.86	\$16,182
YTD P2 Savings/Avoidances	16				11,291.98	\$321,794

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Sandia National Laboratories/California First Quarter FY00 Accomplishments						
Accomplishment	P2 Activity Type	Waste Type	Routine or Cleanup Work	New or Ongoing Project	Waste Reduction for Quarter (M ³) ^[1]	Savings for Quarter (\$)
YTD P2 Savings/Avoidances	0				0.00	\$0

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Sandia National Laboratories/New Mexico First Quarter FY00 Accomplishments						
Accomplishment	P2 Activity Type	Waste Type	Routine or Cleanup Work	New or Ongoing Project	Waste Reduction for Quarter (M ³) ^[1]	Savings for Quarter (\$)
Cooling system upgrade for energy cost and greenhouse gas emissions reductions (from 1999 GSAF funding)	Programmatic	Other	Routine	New	0.00	\$0
Solvent substitution project from 1999 GSAF funds	Programmatic	Other	Routine	Ongoing	0.00	\$0
Activity Totals	2				0.00	\$0
Closed loop oil recycling from ROI funding	Recycle/reuse	HAZ	Routine	Ongoing	1.43	\$19,875
Crushed concrete and asphalt material to required specification for reapplication (1998 ROI project)	Recycle/reuse	SAN	Routine	New	5,895.00	\$75,000
Reduction of coolant waste with implementation of coolant recycling systems from 1999 GSAF funding	Recycle/reuse	SAN	Routine	New	0.18	\$6,144
Activity Totals	3				5,896.61	\$101,019
pH neutralization system from 1999 GSAF funding	Source Reduction	HAZ	Routine	Ongoing	0.19	\$2,625
Purchase of bio-soy oil from GSAF funding	Source Reduction	HAZ	Routine	Ongoing	0.52	\$2,000
Purchase of reusable PPE from 1997 ROI funding	Source Reduction	LLW	Routine	Ongoing	7.95	\$8,000
Electronic x-ray system from 1999 GSAF funding	Source Reduction	WW-SAN	Routine	Ongoing	6.80	\$9,700
Activity Totals	4				15.46	\$22,325
YTD P2 Savings/Avoidances	9				5,912.07	\$123,344

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Waste Isolation Pilot Plant First Quarter FY00 Accomplishments						
Accomplishment	P2 Activity Type	Waste Type	Routine or Cleanup Work	New or Ongoing Project	Waste Reduction for Quarter (M ³) ^[1]	Savings for Quarter (\$)
Items gifted to schools' math/science programs	Programmatic	Other	Routine	Ongoing	0.00	\$0
Activity Totals	1				0.00	\$0
Aluminum cans recycling	Recycle/reuse	SAN	Routine	New	0.25	\$0
Anti-freeze recycling	Recycle/reuse	SAN	Routine	Ongoing	0.06	\$0
High pressure sodium bulbs recycling	Recycle/reuse	SAN	Routine	Ongoing	0.00	\$0
Tin recycling	Recycle/reuse	SAN	Routine	New	4.08	\$252
Sale of used batteries for recycling	Recycle/reuse	SAN	Routine	Ongoing	0.06	\$57
Cardboard recycling	Recycle/reuse	SAN	Routine	Ongoing	10.88	\$0
Fluorescent light bulbs recycling	Recycle/reuse	SAN	Routine	Ongoing	0.10	\$0
Pallets recycling	Recycle/reuse	SAN	Routine	Ongoing	0.04	\$0
Paper recycling	Recycle/reuse	SAN	Routine	Ongoing	35.92	\$0
Plastic recycling	Recycle/reuse	SAN	Routine	Ongoing	0.02	\$0
Toner cartridges recycling	Recycle/reuse	SAN	Routine	Ongoing	0.01	\$0
Unprepared steel and stainless steel sold for recycling	Recycle/reuse	SAN	Routine	Ongoing	8.18	\$537
Used oil recycling	Recycle/reuse	SAN	Routine	Ongoing	1.02	\$0
Activity Totals	13				60.62	\$846
YTD P2 Savings/Avoidances	14				60.62	\$846

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